

IV. Effective Exhibits and Courtroom Technology

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A. Overcoming Fear and Confronting Technology

There is no need to be fearful of technology. Technology should be seen as a tool for presenting your case in the most efficient and compelling way possible and its selection should be a secondary consideration. Fortunately, there is wonderful software available for each phase of a case, from the initial contact with the client and the organization of evidence to a seamless presentation in court. For several years, I have taught a course called Litigation Support Systems and Courtroom Presentations as part of the legal informatics certificate. This course was developed and team-taught with my colleague, Professor Beth Lykins. The material in this section of the seminar manual is taken from the individual modules in our course. Some of the software that I particularly like and which is covered in the course includes CaseMap, TimeMap, Sanction and SmartDraw, but commonly available software such as Microsoft's Word, Excel and PowerPoint can be excellent tools for various facets of and activities in a case.

Several important issues when developing a courtroom presentation that are discussed below are:

- The need to match the technology with the lawyer's presentation style and comfort level.
- That the technology enhance rather than detract from the presentation of the case.
- The ethics of maintaining evidence in its original form and disclosing any need for and the methods of alterations beforehand.
- The technology already available in the courtroom versus bringing it in.
- The budget for and logistics of using courtroom technology.
- How the technology might make subtle changes to what the jury sees, such as color.
- The need for the lawyer to practice with the technology beforehand.
- Testing the technology beforehand and having a backup plan and extra equipment available.

B. Preparing for the Digital Trial

Preparing for a trial has certainly changed since I finished law school. When I graduated in 1994, I worked for a lawyer who concentrated his practice on personal injury law. He had a major case going at the time - the so-called "million dollar" case. I still remember his enormous conference table, which was covered with a series of thick 3-ring binders. These binders were stuffed with all of the evidence for his case, which involved a man who was knocked off a ladder, falling some 40 feet to the ground. Each item in the binder had a label on it. These binders were filled with drawings of the accident scene, testimony from the parties and witnesses, documents filed with the court, photographs, medical records, hospital bills, etc. It was a massive amount of information to keep track of - and to bring to court. The lawyer had to rely on his memory to remember "who said what" in which document and then pour through the binders to find that document. Fortunately, with today's litigation support software, a lawyer no longer has to rely on paper records in 3-ring binders. It is now quite possible to have all of this information in digital form, indexed, abstracted and searchable - and to be able to bring it all to court with just a laptop or tablet.

The use of litigation support software has become even more necessary in the digital era. In the paper world, our client's file might have contained only a copy of the final signed document. In the digital world, we create a trail of information that might be relevant to a case, almost without thinking about it. Instead of a copy of the final document in paper form, we may have numerous versions of the document, saved on number of computers, mobile devices and flash drives, shared with dozens, if not hundreds, of people. This trail of information often goes beyond text documents to include spreadsheets, databases, social media, blogs, audio, video, text messages, email messages, images and even data from Internet of Things (IoT) devices. Even what we might consider a "small" legal case can mean handling a great deal of information. Litigation support software gives us the opportunity to do this - and using this type of software will probably become the expectation in the future for all but the simplest cases.

It has been suggested that, at some point, lawyers who continue to rely on 3-ring binders rather than using litigation support software will be practicing below professional and ethical standards, thus subjecting themselves to disciplinary action or malpractice claims. In fact, changes to the ABA Model Rules of Professional Conduct (as adopted in whole or in part in each state) already discuss that lawyers need to be competent in the law and its practice – and the revisions to the Rules from the Ethics 20/20 project make it clear that the language “and its practice” includes the appropriate use of technology. Note that one of the recommendations from the ISBA Future of the Provision of Legal Services Committee is that this language from Comment 8 of ABA Model Rule 1.1 be incorporated into the Indiana Rules of Professional Conduct.

[8] To maintain the requisite knowledge and skill, a lawyer should keep abreast of changes in the law and its practice, including the benefits and risks associated with relevant technology, engage in continuing study and education and comply with all continuing legal education requirements to which the lawyer is subject. (https://www.americanbar.org/groups/professional_responsibility/publications/model_rules_of_professional_conduct/rule_1_1_competence/comment_on_rule_1_1.html, accessed 7/17/17.)

The evolution of litigation support software into more robust systems with more features and functionality will provide incentives for law firms to implement this software. Moreover, many vendors are now developing full-service suites of software and services that cover both litigation support and electronic discovery. Interestingly, the market for e-discovery services is forecast to be \$14.7 billion dollars by 2019, as reported in the May 2016 issue of *ABA Journal*. Of course, another aspect of litigation support is client confidentiality – so any systems or personnel (even third-party contractors) that are part of a case must observe the highest level of security. (The public is on heightened alert about the security and privacy of personal information. The May 2016 issue of *ABA Journal* reported on a recent survey that indicated that nearly 1 in 5 consumers say that they no longer purchase products or services from a company with a reported data breach.)

Chapter 15 – The Electronic Courtroom – from *Technology in the Law Office*, 4th edition, provides an excellent overview of various kinds of equipment available in a modern courtroom that can be used to effectively present evidence and information to the judge and jury members. As stated on page 450, “[i]ncreasingly, courts are embracing the use of technology and computer systems for presentations in the courtroom. The initial reluctance to allow these systems is giving way to acceptance, as judges realize that these tools can enhance the speedy administration of justice.” As the author indicates, courtrooms are now being outfitted with computers and audiovisual presentation systems. Exhibit 15.1 shows the website for the United States District Court for the District of Minnesota with links to training materials for its courtroom technology. The U.S. District Court for the Northern District of Indiana provides information about its courtroom technology, including its evidence presentation camera, at <http://www.innd.uscourts.gov/judges-info/JVB/CourtroomTechnology>, accessed 7/17/17. Likewise, the U.S. District Court for the Southern District of Indiana provides a guide for its Video Evidence Presentation System (VEPS) at <http://www.insd.uscourts.gov/courtroom-technology>, accessed 7/17/17. On page 451, the author explains some of the features and benefits of courtroom technology.

Litigation support software can be used to display documentary evidence, graphic presentations, and computer simulations of accident cases. Relevant portions of documents can be displayed as the witness identifies the document during his or her testimony. Everyone in the courtroom can see the document at the same time, without the need to distribute paper copies. Lawyers can rapidly search thousands of pages of depositions and documents from their laptop computers (and increasingly, tablets and mobile phones) to find pertinent material for examination or cross-examination of witnesses. Software can also display part of a transcript of a deposition while the video of the deposition is running, as shown in Exhibit 15.2.

On the other hand, the author notes that the types of electronic equipment available can vary, even among courtrooms within the same courthouse. These differences may occur because of budgetary issues or the personal preferences of the judges. As the author highlights on page 451, the legal team must be prepared to make the best presentation of its client’s case, whether in a traditional courtroom or in a contemporary, multimedia

courtroom. An exciting new development in the presentation of a case is the availability of demonstrative evidence created with 3D printing; several companies now offer this service and it is gaining wider acceptance in courtrooms.

As indicated on page 451 of *Technology in the Law Office*, 4th edition, basic tools such as easels and display boards have now been replaced by modern technology, such as visual presentation systems and computer projectors. An example of an evidence presentation cart is shown in Exhibit 15.3. More complex arrangements may include computer monitors at the lawyer's table, on the judge's bench, in the jury box or on the witness stand, as illustrated in Exhibits 15.4-15.5. In Exhibit 15.6, you can see the large-screen monitor in the United States District Court in St. Paul, Minnesota, that is visible to anyone in the courtroom. Some courts have multimedia podiums that include special projection devices like a DVD player or document projector, which is shown in Exhibit 15.7 on page 455. If a courtroom does not have its own multimedia equipment, the legal team will typically be allowed to bring in its own equipment. As the author indicates on page 454, such permission is granted when both sides can afford the shared costs or when a better-financed side allows its equipment to be used by the opposing party.

As stated on page 454 of *Technology in the Law Office*, 4th edition, “[l]earning how to use the different types of equipment is not difficult, but may take a little practice. Everyone on the trial team should be comfortable with the operation and use of the equipment before the start of trial.” This may include taking a required training class or receiving instructions from the technology support department. Note the components of a wired courtroom, as described on page 455. In Exhibit 15.8, we can see a basic setup for a courtroom, including the placement of various pieces of equipment. Note the important discussion of providing the judge with a “kill switch” so that he or she can maintain control of the trial and respond to any objections while having the ability to cut off the video display by temporarily blacking it out. Exhibit 15.9 shows a courtroom configuration that features a judge-controlled kill switch (second video switch between the main video switch and the projector) at the judge's bench. More complex courtroom

setups with additional equipment are illustrated in Exhibits 15.10 and 15.11. As the author observes on page 457, “[s]ince every court is different and each judge controls his or her own courtroom, it is essential for the legal team to consult the appropriate personnel or check the court’s website for local rules and procedures.” On pages 457-458, the author has provided a number of helpful suggestions for using technology in court. Note that there are local and national trial consulting and support vendors that can provide equipment and technical assistance during the trial. As the author indicates, depending on the type of case, the audiovisual tools needed and the budget allowed, the legal team may want to bring in a specialist. This frees the lawyer from having to worry about operating or trouble-shooting the technology so that he/she can concentrate on presenting the case.

As indicated on page 459 of *Technology in the Law Office*, 4th edition, the presentation graphics that can be used by the lawyer will be limited by the equipment that is available in the courtroom. If appropriate equipment or power sources are not available, which can be a problem in older courthouses, the lawyer may need to rely on traditional print media, such as jury notebooks, easels and display boards. The availability of technology in the courtroom must be determined well in advance of the trial before time and funds are spent creating media that will not be able to be used. If the courtroom is not equipped for courtroom presentations, the court may or may not allow the installation and use of additional equipment. Furthermore, the client may not be willing to pay the costs of acquiring and installing the hardware that is needed.

Courtrooms may also have additional items that can be effectively used by the legal team. These items include:

- Annotation monitor
- Document camera
- Voice reinforcement systems
- Audio and video conferencing

The author of *Technology in the Law Office*, 4th edition, provides an excellent discussion on pages 465-466 about the value of working with the courthouse’s

technology staff. Not only should the lawyer and the legal team be aware of the need to clear equipment through security, but they also need to know what equipment to bring if the courtroom does not contain the necessary equipment or there are issues with compatibility. The author suggests that the court's security office be contacted ahead of time to learn the policies and procedures for bringing equipment in and setting it up.

A technology mishap can happen for a number of reasons, from equipment failure to loss of electrical power. The author suggests anticipating worst-case scenario and having back-up systems and hard copies of materials. All equipment should be tested in advance and spare parts such as bulbs should be available. It is helpful to have a separate operator for the equipment, so that the lawyer is free to focus on presenting the case and building rapport with the judge and jury members. No matter what, the most important consideration is that nothing – not even technology – will disturb the momentum of the case or the lawyer's ability to make a connection with the judge and jury. As most of us have experienced, nothing spoils a good presentation as quickly as when the speaker needs to stop so that he/she can try to fix a technology problem.

Chapter 16 – Presentation and Trial Graphics – *Technology in the Law Office*, 4th edition, is an excellent introduction to presentation and trial graphics. The Opening Scenario on page 471 highlights why being able to display photographs and high-quality graphics might be essential in helping jury members understand what had happened in a case, but that the lead lawyer and his legal team are aware that poor graphics could either hurt the case or be excluded by the judge under the rules of evidence and procedure. As the author reminds us on page 471, a picture is worth a thousand words – and this is particularly relevant in trial presentation. While properly prepared graphics or a PowerPoint presentation can be excellent ways of telling a story and expressing a key point, graphics or a PowerPoint slides that are poorly prepared are boring and can even distract the from the main message. More people are using graphics in presentations, especially since graphics software has become more affordable and easier to use. Among the most popular graphics programs are those that are included as part of

software suites, such as Microsoft PowerPoint, WordPerfect Presentation and Quattro Pro. Note the discussion on page 472 of the role of litigation graphics during the trial as well as when preparing for trial or as part of settlement negotiations. Exhibit 16.1 shows a sample settlement brochure that was created using word processing software. A poignant message can often be delivered through a “day in the life” video that shows the impact that an accident or injury has had on a person as can a comparison of a client’s life before and afterwards.

One message from this chapter is that readily available suites of software from Microsoft and Corel are useful in managing a case, such as for keeping records of all information about the case, the activities of each person working on the case and the items that need to be completed. This information might be captured using time records, to-do lists, contact lists and lists of investigative or discovery items. Exhibits 16.2 and 16.3 illustrate some of the templates that are available in Excel 2013 and Corel Quattro Pro. As the author notes on page 473, while technically not part of litigation graphics, they illustrate the types of tools that are available without purchasing additional pieces of software. An interesting use of a spreadsheet is shown in Exhibit 16.4, which is the expenses and income needs of a custodial parent in a family law case. The same type of spreadsheet can be set up with columns that identify and track expenses, individual client expenses or any other set of data for which keeping track of the items and amounts is important. Notice how this information can easily be imported by copying and pasting from Excel into Word in Exhibit 16.5.

Electronic databases such as Microsoft Access are discussed on page 475, with an example of how this software can be used to create a task list (Exhibit 16.6). Even simple word processing software can be used to create useful materials for cases, such as the letterhead with the photograph of the school bus after the accident in Exhibit 16.7. Fortunately, it is very easy to integrate, import and export files between various office suite software. For example, Exhibit 16.8 shows the results of using the PDF format to

PowerPoint slide utility tool. Likewise, the SmartDraw software includes a number of export options, as demonstrated in Exhibit 16.9.

Pages 479-482 are devoted to creating PowerPoint presentations. As stated on page 479, PowerPoint has become the standard for making electronic presentations to all types of audiences. When used appropriately, PowerPoint can emphasize a speaker's main ideas and help an audience understand and remember key concepts and facts. Note that graphics and documents created in other software applications can be imported into a PowerPoint presentation, such as those created by TimeMap (LexisNexis) and SmartDraw. Exhibit 16.10 demonstrates the addition of clip art into the first slide of a trial presentation. Considerations when creating PowerPoint presentations include viewability, density, sounds and imagery as well as being sure to stand to the side of the screen so as not to block the audience's view. Slide transitions can be enhanced through a variety of features, such as fading in and out or the use of sound (see the options for sound clips under the Insert tab in Exhibit 16.11). Graphical elements can be edited by re-sizing or rotating, as shown in Exhibit 16.12. Microsoft provides a number of web-based tutorials for learning how to use different features of PowerPoint. Sample presentations that can be used as templates or learning tools are also available.

Graphics applications are introduced on pages 482-487 of *Technology in the Law Office*, 4th edition. Two choices are Microsoft Visio (see the sample work screen in Exhibit 16.13) and SmartDraw (see the sample accident reconstruction templates in Exhibit 16.14 and the accident scene created with SmartDraw in Exhibit 16.15). As stated on page 482, "[i]n addition to its intuitive interface, one of SmartDraw's biggest advantages for the legal team is the thousands of templates and icons available for creating graphics quickly." Predesigned graphics can be modified and finished graphics can be exported into other software, such as PowerPoint (see Exhibit 16.16). Pages 484-485 describe the rotation "handles" in PowerPoint and SmartDraw, which are demonstrated in Exhibits 16.17 and 16.18. One of the special features of SmartDraw that is especially helpful for litigation is its Symbol Library, shown in Exhibit 16.19. The

starting point for creating a graphic in SmartDraw is selecting a template that most closely resembles the actual image. For example, an automobile accident at a four-way intersection can be represented by the accident reconstruction SmartTemplate. As indicated on page 487 and shown in Exhibit 16.20, each of the items shown in the main panel of the graphic can be moved, removed or edited and additional items can be added from the SmartPanel library of symbols on the left side of the screen with help and instructions on the right side of the screen. Graphic elements can be further modified by adding text and color fill using the ribbon tabs and menu items. Completed graphics can be saved in a variety of formats such as PDF or exported directly to applications such as PowerPoint. The Practice Tip at the bottom of page 487 describes how graphics technology can be used to prepare an excellent settlement brochure and how this brochure can then be extended into the trial phase of litigation. In thinking about presenting evidence in a courtroom, it is wise to remember the "BUM" Rule, described on pages 488-489, which stands for believe, understand and remember.

C. Choosing the Right Method and Form of Exhibit

The Perfect Fit: Tailoring Courtroom Technology to Win Cases presents some helpful information on creating courtroom presentations. Although this article is a little old, the author's observations are timeless even as the technology available to lawyers continues to evolve. The story about the man and his new suit is designed to represent the way that some lawyers twist and otherwise distort their cases to make them fit particular types of technology, regardless of whether that technology is right for the point they are making, the case they are trying or their personal style. The profusion of trial technology available means that many lawyers are more confused than ever. Note that at the time the article was published, the author had already worked on more than 1,500 cases throughout the U.S., using every digital technology, from flash-based platforms that integrate multiple 3D animations to simple computer-generated graphics. The author suggests that state-of-the-art computerized trial graphics are not the "be all and end all" of courtroom presentations. Instead, he has learned to tailor the visual strategy and

technology to each message. The author of *The Perfect Fit: Tailoring Courtroom Technology to Win Cases* offers several basic rules to build winning trial graphics:

- Understand the two kinds of technology: “acoustic” (blackboards, newsprint, mock-ups, exhibit boards and models) v. “electric” (overhead projectors, computers, videotapes, animations, Adobe Flash)
- More technology is not necessarily better technology. Note that expensive technology rarely compensates for lack of preparation and perhaps may make it even more obvious
- Don’t let the medium drive the message. The message is what you show the jury, consisting of the content that you want the jury to remember and the format that best conveys the content. The medium is how you convey your message – it is simply a delivery system.

The author of *The Perfect Fit: Tailoring Courtroom Technology to Win Cases* suggests the following steps to avoid the temptation to use more sophisticated technology than needed:

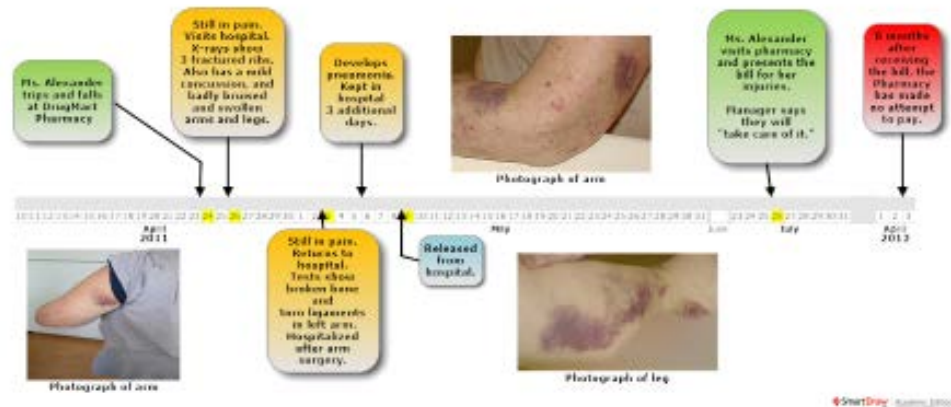
- Determine the message
- Design the format for your message
- Choose the medium that best conveys your message
- Choose your technology with care – the author suggests four broad variables:
 - Case specific requirements – number of documents needed at trial, number of exhibits, case budget and courtroom limitations
 - Impression you want to make with the jury
 - Quantity – how many of the graphics need to be displayed at the same time?
 - Personal preference and style of the lawyer
- Mix your media, but make it matter. To keep the jury interested, it is suggested that a lawyer use a mix of computer graphics, blackboard or flipchart and exhibit boards.
- Practice, practice, practice. Note the sad description on page 20 of the lawyer who had not properly prepared to use an overhead projector and the unfortunate result for the client. As stated in the text, if this kind of debacle can happen with an overhead projector, imagine the same scenario with more advanced technology.

A good presentation needs to run smoothly so that the jury can stay focused on the message, not the technology. Ultimately, it is the lawyer’s job to persuade. Technology can help, but it can never replace the critical process of uncovering

the key points of a case and then carefully structuring – and communicating – those points in a way that convinces a jury. The technology that a law firm uses should be tailored to the law firm’s specific cases rather than being a one-size-fits-all solution. Per the author of *The Perfect Fit: Tailoring Courtroom Technology to Win Cases*, the technology that is chosen for a case should fit the facts like a custom-made suit.

Timelines are an especially powerful way to demonstrate what happened when to a judge and jury as well as to clarify questions that are being asked during a deposition. Timelines are frequently presented graphically, with some examples shown in Exhibit 10.16 of *Technology in the Law Office*, 4th edition that were generated by the SmartDraw software. Exhibit 10.17 is a timeline created directly from the CaseMap file using TimeMap software, which is also a LexisNexis product. As indicated on page 302, when a lawyer is analyzing a new case, timelines offer the opportunity to clarify his/her thinking and make certain of the facts and elements in a case. A comparative timeline, which shows the sequence of events from the plaintiff’s and defendant’s perspective, can illuminate issues and inconsistencies in a case. Because of the recent amendments (December 2015) to the Federal Rules of Civil Procedure, the time periods for certain activities in the discovery process are significantly shortened, making an internal timeline for the legal team that reflects deadlines for each activity in the litigation especially useful. Note that as an integrated software application, CaseMap allows a seamless transfer of data between applications, including into TimeMap. LexisNexis provides extensive assistance for users of CaseMap, including webinars. Some additional information on creating a new case file and using templates in CaseMap is provided on page 304. Commentary on the power and potential of timelines is provided on pages 304-305. In addition to TimeMap, we can use SmartDraw to construct some beautiful, detailed timelines that can incorporate text, photographs, arrows, etc. Here is an example of a timeline created by one of my students as part of her Final Project in the course (permission to use this image was granted via email).

A Year in the Life of Sally Jo Alexander



Chapter 5, titled Developing Powerful Stories and Themes, in *Courtroom Psychology and Trial Advocacy* by Richard C. Waites, is devoted to developing powerful stories and themes in the courtroom. Although this book is a little old, the author's insights and recommendations about preparing for a trial are timeless. He notes on page 133 that storytelling is nothing more than sharing a narrative tale of experiences, either real or imaginary. Storytelling is essentially a cultural art form for preserving and transmitting thought, perceptions, images, motives and emotions with others.

Note the extent to which we are captivated by the vignette on pages 133-134 of *Courtroom Psychology and Trial Advocacy*, a brief excerpt from a story filled with intrigue, excitement and terror along with heroes and villains. The text on pages 134-135 discusses many reasons why we tell stories to each other. Likewise, pages 135-136 explain why storytelling is powerful from a psychological standpoint. Storytelling is one of the most powerful ways of communicating with other people and is the

fundamental way to learn about life, even among children as young as two years of age. The fact that we love stories is certainly supported by the development of Audible and other similar services. Storytelling is a form of art; pages 136-137 of *Courtroom Psychology and Trial Advocacy* describe its importance in various cultures. Great orators were called upon to speak for citizens who were involved in legal disputes – life and death issues as well as disputes over personal liberties, property and contract rights. Public debate and storytelling have been vehicles for turning points in the evolution of our culture.

Pages 137-138 of *Courtroom Psychology and Trial Advocacy* discuss several important considerations when telling a story in the courtroom. We are limited to the evidence and the inferences that can be reasonably drawn from that evidence. However, the text notes that within the confines of these broad limitations, there are many opportunities to develop a story that is both entertaining and persuasive. The story and style of telling the story should complement the style and character of the lawyer who tells the story. Most important, the lawyer must agree with the content of the story and its messages in order to be most effective. A story should be simple enough for an audience (the jury or judge) to follow without difficulty. As mentioned above, a good story will have a simple point or moral that demonstrates purpose and meaning to the audience. As indicated by the authors of *Courtroom Psychology and Trial Advocacy*, other characteristics of good stories are an opening that sets the scene, the characters, the chronology, action and suspense, sensory imagery, brevity, and minimal but powerful dialogue. The development of a compelling story is not an event, but a process.

As stated on page 138 of *Courtroom Psychology and Trial Advocacy*, there are three principles that significantly affect the development of central themes for a case. First, it is important to distinguish the role and impact of descriptive versus evaluative themes. Descriptive themes characterize particular pieces of evidence and evaluative themes characterize the overall principles for which the case stands. Second,

compelling themes help members of the jury organize case information in the way the lawyer wishes and helps them overcome disputes or conflicts with specific evidence. Third, themes must fit well within the jury's preconceived attitudes and life experiences and must outrank the opposing party's themes in fundamental importance. Determining the best themes and psychological messages prior to a trial should involve intensive research.

Suggestions for researching themes are offered on page 139 of *Courtroom Psychology and Trial Advocacy*, including conducting scientific jury research focused on the specific circumstances of the case. As listed on page 140 of *Courtroom Psychology and Trial Advocacy*, the most persuasive themes:

- Transcend the facts of the case
- Are emotionally powerful (generally take the moral high ground)
- Address the larger significance of the case
- Evoke powerful images
- Can be expressed visually, in words, and through tangible means
- Match the jury's need to "do the right thing"
- Provide consistency throughout the presentation of the case
- Provide consistency with other themes
- Provide consistency with the evidence and testimony

As stated on page 140 of *Courtroom Psychology and Trial Advocacy*, the themes that are presented in court must touch the hearts and minds of the judge and jury. Expanding one's consciousness beyond the facts will exponentially increase the possibilities for powerful themes. An effective theme is easy to remember, appeals to common sense, is in accord with concepts of fairness and justice and is consistent with the evidence. An effective theme resonates throughout the case, in every phase of the trial, and is revealed in lawyer argument, visual aids and the direct and cross-examination of witnesses.

In determining the right themes for the case, the lawyer should identify the most powerful story that can be told based on the experiences and attitudes of those most likely

to serve on the jury. The text on page 141 of *Courtroom Psychology and Trial Advocacy* suggests that a methodical rather than haphazard approach be used:

- Make a list of the potential themes that should be considered – possibilities for sources of themes are provided on page 141.
- Rank the list of possible alternatives in order of how they would appeal to a judge or jury members who are likely to hear the case. This could involve good intuition as well as objective testing using focus groups or mock trial research methods.
- Scrutinize every possible theme closely to avoid personal biases.
- Note that developing powerful themes requires creative thinking and rigorous testing.

As stated on page 142 of *Courtroom Psychology and Trial Advocacy*, most stories have a plot which involves the meeting of two opposing forces, typically referred to as the protagonist and the antagonist. Note the examples that are discussed on page 142. Every story has an “inciting incident” – a pivotal point at which the balance between the protagonist and antagonist is disturbed. At the end of the story, the protagonist either triumphs or loses. Even after the story ends, there is the aftermath and its consequences. In terms of a legal case, how was the protagonist harmed? What should his/her remedy be? How should he/she be compensated or made whole? Who should be punished and how?

As indicated on page 143 of *Courtroom Psychology and Trial Advocacy*, jury members are vitally interested in the character of the parties and the witnesses in a trial. Research and experience indicate that character is often the most important element of a story. It is important to analyze key individuals in a trial so that they can be presented effectively. The most important characters will require more detailed analysis and development. The text in the box on page 144 provides some considerations for developing characters. It is often helpful to view the characters objectively and from a perspective that jury members would anticipate in the setting of the case. Note the different portrayals of characters on page 144 whether you are representing the plaintiff who was injured rather than the employer. Themes of the case should be interwoven with the personal characterizations that make the story believable and that enhance

consistency between the characters, behaviors and events. Consider the example of the Fortune 500 Corporation and the individual inventors on page 145. If you were the lawyer, how would you characterize the parties, depending on which party that you were representing?

If there is any inconsistency between themes, character traits and the perspective of the story, jury members will feel uncomfortable and may find the story less acceptable and credible. It is important that the characterizations chosen and the story be consistent with undisputed facts – unassailable facts whenever possible. As indicated by the author of *Courtroom Psychology and Trial Advocacy*, it is most helpful for a key witness, especially someone who is a central figure in the case, to look at members of the jury directly and describe in clear terms about a certain issue or what happened in a case. It is very persuasive for a witness to reveal the truth about himself or herself under direct or cross-examination in addition to the narrated description provided by the lawyers.

Pages 146-148 of *Courtroom Psychology and Trial Advocacy* describe how to add creativity to storytelling. The text suggests a number of strategies for this, including committing the essence of the story and key phrases to memory, constructing a written form of the story, carefully reading and then practicing the story. It is important to note that powerful images are created with a blend of facts and descriptions that convey powerful meaning, as illustrated in the example on page 147 of *Courtroom Psychology and Trial Advocacy*. By following these suggestions, the story can be more effective in capturing and holding the audience's attention and in creating the impression that the person telling the story is truly committed to that story. It will eliminate any barriers, such as the reliance on notes or books, between the person telling the story and the audience.

In addition to thorough research and preparation, the text on page 148 of *Courtroom Psychology and Trial Advocacy* provides some advice for being relaxed and in the right frame of mind for telling the story, including dressing appropriately but comfortably, arranging the setting in advance, breathing deeply and meditating. In

contrast to what you might think, it is actually best to be a little bit nervous beforehand. It is important to remember that the only reasons that we are telling the story in the courtroom are to help the judge or jury members understand what happened and to provide a convincing presentation of why our client's version of the story is the most credible.

The text on page 149 of *Courtroom Psychology and Trial Advocacy* states that the mark of a good trial lawyer is the consistent advocacy of one central theme during all aspects of the trial. In one sentence, you must be able to tell the jury or judge what the dispute is about and why your client should win. This is why it may not be good strategy to use multiple themes. The lawyer must clearly think through the case in advance to determine the probability of what the jury will believe is the truth after all of the evidence has been presented.

Once the one central theme has been developed, the remainder of the trial involves building the story that gives meaning to the theme. The story must appeal to the heart and soul – not just the mind – of each member of the jury. A trial is essentially a contest of credibility, so the story being told must always “ring true.” Storytelling allows the lawyer to evoke a strong emotional response from jury members. Though storytelling, jury members are able to place themselves in the situation from the client's perspective. This adds moral force to a client's position and maximizes the chances of achieving the desired outcome in the case. Two recent articles from the *ABA Journal* emphasize the continued importance of storytelling as part of effectively presenting a case in court. [See *Shaping Your Legal Storytelling: Voice and Perspective Can Affect How the Law Is Applied to the Facts in Your Case* and *Telling Unfinished Stories: How Lawyers Can Craft a Case Narrative to Spark Jurists' and Jurors' Interest in Writing the Ending*. Note the article *Tell Me Where It Hurts: Early Assessment of the Strengths and Weaknesses of Your Case* from *Michigan Bar Journal* and how even during that very first meeting with a client, the lawyer should already be beginning to shape the preparation of the case in his/her mind.]

In terms of planning for the technology needs in a case, another helpful item is the Trial Support Preparation Worksheet, which was presented at a workshop offered by the International Legal Technology Association (ILTA). Note the variety of questions asked about:

- The courtroom layout and limitations, including the availability of equipment, electrical and communication connections and security if clearance is needed to bring equipment into the courtroom
- Description of the project and objectives for trial presentation
- Case contacts, including various vendors who might be used in the case
- Types of material to be used in the case and detailed descriptions
 - Documents
 - Deposition Transcripts and Videos
 - Photographs
 - Other (hard copy or digital format with file type)
- Deliverables to be presented at trial and instructions
 - Document Exhibits
 - Transcripts
 - Photographs
 - Video Depositions
 - X-rays/CT Scans
 - Timelines
 - Graphics (static and animations)
 - Electronic trial binder (with navigation using bar codes, Bates numbers or document identification numbers)
- Software and presentation methods
 - Presentation Software (PowerPoint, Sanction or other)
 - Exhibit Preparation (in-house or third-party vendor)
 - Trial Presentation (in-house running of the software or vendor will prepare and set up software)
- Required equipment for the courtroom and who will supply it
 - Document Camera
 - Projector and Screen
 - Audio
 - Flat Panel Computer Monitors
 - Video Deletion/"Kill" Switch
 - Projector Stands
 - Cables
 - PowerPoint Remote Control/Laser Pointers
 - Touch Screens

- Trial Laptops
 - Other Equipment
- Required Breakout Room Equipment
 - Black and White Printer
 - Color Printer
 - Multi-function Machine
 - Laptop/Desktop Computer
 - Other Equipment
- Hotel information, including Internet bandwidth, access in guest and conference rooms, firewall restrictions, contact information for vendors and Internet support
- Required war room equipment
 - Networking (router, switch)
 - Server (to host document and transcript databases)
 - Laptop/Desktop Computer
 - Black and White Printer
 - Scanner and PC
 - Color Printer
 - Multi-function Machine
 - Full-size Photocopier
 - Other Equipment

Chapter 17 in *Technology in the Law Office*, 4th edition, discusses electronic trial presentation. Note the vignette in the gray box on page 513 which describes the concerns with having elaborate courtroom technology, including costs. As indicated on page 513, modern trial presentations frequently include videotaped depositions, photos, videos and computer simulations, which may be shown on projection screens, personal monitors or large-panel displays. On the other hand, the author indicates that managing what could be hundreds of individual multimedia elements in the courtroom can be a nightmare unless they are organized and easily accessible (even thousands, if you followed the Richmond Hill trials, you may have seen the prosecutor and her staff loading hundreds of boxes of evidence into a van to take them to South Bend). LexisNexis Sanction, TrialDirector by inData and similar trial presentation programs allow the legal team to organize and manage documents, depositions, photographs and other data and then display them when needed during depositions or trial. However, note the practice tip at the top of page 514 about supported formats, because not all native file formats can be used with all trial presentation programs.

As stated on page 514 of *Technology in the Law Office*, 4th edition, “[t]he primary goal of every trial attorney is to make the best possible presentation of the case and obtain a favorable verdict.” Although a simple handwritten chart may be the best method for a case (given time, staff and budget constraints), more frequently an effective presentation will require the use of photographs, videos, computer simulations and other multimedia elements that will appeal to a jury of citizens who have been raised in the era of television, particularly with the number of law and crime shows that they have probably watched. Trial presentation software allows different types of media, including still photographs, text documents, video and sound clips and computer simulations, to be displayed using a single program. If we think about all of the different types of evidence we might have, it is easy to see why having software that can provide all of the necessary viewers in one package could be appealing. Multifaceted presentation programs, such as LexisNexis Sanction and inData’s TrialDirector, provide a single point of access for exhibits of different types. You can see an example of the file formats that are available in Sanction in Exhibit 17.1 on page 515 of *Technology in the Law Office*, 4th edition. Selected files can then be previewed on the lawyer’s personal computer monitor before projecting them onto the court’s presentation system, as shown in Exhibit 17.2. Documents can be annotated using highlighting, arrows or underlining. The advantage of these advanced presentation software packages is their ability to work with a variety of file types, including video, which is especially appealing for showing the depositions of witnesses. A videotaped deposition of a witness can be presented with a written transcript displayed simultaneously in a split screen, as illustrated in Exhibit 17.3. The transcript can be highlighted to focus on specific questions and responses or it can be annotated.

As indicated on page 517 of *Technology in the Law Office*, 4th edition, with everything stored electronically, it is not difficult to locate and display almost anything at a moment’s notice when testimony or trial strategy changes. With coordination between the lawyer and the legal team, the presentation can be flawless. However, using trial presentation software requires training and practice. In addition to training through

vendors and bar associations, it may be appropriate to bring in a trial support consultant to manage the presentation system, which then allows the lawyer and the legal team to concentrate on the case itself. Another advantage of trial presentation software is its flexibility. Note the practice tip on page 517 to be sure that all of the materials you want to incorporate are supported by the trial presentation software that you will be using. Another suggestion is to move all of the materials into a separate folder or group of folders for easy access.

Pages 517-520 of *Technology in the Law Office*, 4th edition, demonstrate how to prepare a courtroom presentation. As indicated on page 517, this requires understanding a few basic Windows tools, such as creating new folders, copying and pasting files and “dragging and dropping” files and folders from one location to another. Note the difference between cutting and pasting versus the drag-and-drop method. Note the recommendation of using copy-and-paste as well as Save As to avoid overwriting or erasing the original files. When importing files into Sanction, it establishes a link to the original location rather than actually removing the files. The information in the first practice tip on page 518 is especially important; making back-ups is critical for safety and security. Many lawyers will bring a complete back-up system to trial, including copies of electronic files and even extra computers. Back-up media can include removable media cards, thumb drives or relatively inexpensive portable hard drives.

As indicated on page 518 of *Technology in the Law Office*, 4th edition, the first steps in creating a presentation are to create a new case and set up the location for saving the files and folders for the case, as shown in Exhibit 17.4. Items for each category can be imported from their original folder on the computer using the Sanction Import Wizard, illustrated in Exhibit 17.5. Note again that importing individual files into a Sanction case does not actually move them; it only creates a link to the location that the software will use when you want to retrieve and view those items. In the sample case, all of the desired items that will be used have been moved to one folder on a removable memory device. When the Sanction software is run, the memory media must be in the computer for the

software to access the link to the files. When items have been entered into the software, they can be previewed by highlighting them in the Sanction Tree View, as in Exhibit 17.1. Of course, as indicated in the practice tip on page 519, it would be best to have the files stored on an internal hard drive rather than a flash drive.

When organizing files in Sanction, note that a number of different presentations can be set up in advance, such as for a specific witness, a particular legal theory or opening/closing statements. To create a presentation in Sanction, desired items from the exhibits listed in the Tree View may be selected and added to an existing presentation or a new presentation by a right click of the mouse and highlighting a specific file, as shown in Exhibit 17.6. Sanction has numerous other tools and features, including a set of tools for marking up and annotating items (Exhibit 17.7). Pages 524-535 of Chapter 17 in *Technology in the Law Office*, 4th edition, provide a more extensive tutorial of how to create a presentation using Sanction.

Here are some important things to keep in mind when creating courtroom presentation graphics.

- Contrast
 - Contrast helps people differentiate items in a presentation
 - Contrast is strong difference between items
- Light and dark
- Small and large
- Color/black and white
- Plain and patterned, etc.

Knowing what items to put into really high contrast can help the viewer understand the importance of something on the visual representation. For example, the title of a slide might be very important, whereas the indicator of the ordinal points (N, S, E, and W) is important, but not as important as other information. If your scene reconstruction is in black and white and the blood spatter is in red, the contrast between the colors will make the blood stand out more, which may appeal to the emotion of the viewer. Something that is too high in contrast can be difficult to look at and might actually detract from what you are trying to demonstrate. For example, if you add a black

and white checkerboard floor to a floor plan, the high contrast will be interesting, but it will be difficult to see the other items on the floor, such as the location of a glove or some other key piece of evidence.

- Text
 - Text should be in high contrast to be easily read
 - Light text on a dark background is hard to read
 - Text should be large enough for the viewer to read
 - If your text is out of proportion to the other items in the presentation, it will lead to confusion in contrast
 - It is important to consider whether or not your presentation will be in print or projected
 - Text is handled differently between print and projection because of readability
 - Printed text should be a serif font (Times New Roman, for example) – books use serif fonts
 - Serif means it has tails on the letter forms
 - These tails help the eye progress from one letter to the next, aiding in reading
 - Projected (or otherwise lighted) text should be san serif (Arial, for example) – many websites use san serif fonts
 - San serif means that the lines in the letter forms are straight, with no tails
 - On a computer screen, serif letters become blurry and instead of leading the eye from letter-to-letter, as in print, they actually detract from the readability of the text
 - Often using san serif fonts for headings and serif fonts for body copy is a good way to help lead the eye through a printed presentation
 - Reversing this can often work on a projected image
 - Contrast between serif and san serif (as described above) can really help with information hierarchy and balance of an image
- Aesthetics and information
 - For people with an artistic background, the idea of making a presentation aesthetic is of the utmost importance
 - In any courtroom presentation, accurate portrayal of information is ALWAYS the most important consideration, but so is understanding human perception
 - Aesthetics can sometimes be a distraction to the information
 - BALANCE is the key concept
 - For people with a technical background, aesthetics is often completely ignored in favor of the facts
 - Information can be overwhelming if presented in just a fact-based manner

- Finding the correct balance between contrast, type, visuals and information is the heart of good courtroom presentation

As indicated by Lykins, what you see is not always what you get with color. For example, colors that are generated on the Macintosh OS are slightly different from colors generated in a Microsoft OS environment. This is also true when the same file is seen on different monitors or projectors. For this reason, a web-safe color scale has been developed that will help ensure accurate color reproduction between different display devices. For example, in a standard JPG file (the most common file type for photographs on the Internet) there are 16.7 million possible colors, whereas a GIF file (usually used for clip art or other graphical illustrations) contains only 256 possible colors. The web-safe color pallet contains a further reduction of choices in that there are 216 colors that are agreed upon by both Mac and PC displays. When working with color-critical files, this becomes very important.

One company that prepares materials to show in court to explain complicated patent law cases is called Demonstratives: <http://www.demonstratives.com/>, <http://www.demonstratives.com/>, accessed 7/17/17. The company prepared the animations for the *KSR v. Teleflex* case, which was heard by the U.S. Supreme Court. Be sure to click on Gallery at the top of the website to see some of their work. *See also* the article from *ABA Journal* about how replicas and animations can help present a winning case.

Knowing the differences between preparing materials for print versus screen viewing is very important to creating successful courtroom presentations. Thinking back on the information about contrast and type, let's take this a step further. Here are some key things to think about when deciding how to approach your presentation materials. Print might be appropriate:

- If your case is being tried in a courtroom without technology
- If there are technical difficulties with the courtroom technology

- If you need something that can easily be transported
- If you want to ensure that there will be no technological problems, such as a computer crash, etc.
- There could be a myriad of other reasons print could be preferable – just keep it open as an option

If you choose print for your demonstrative aids, here are some things to keep in mind:

- Any images being printed should be printed at 300 dots per inch
- A high resolution file will make for clean, professional prints
- Images from the web generally will be 72 pixels per inch and not sufficient for printing
- The print needs to be large enough for the court to see, which in turn means that it really needs to be high resolution

Photographic images (raster images, such as what is created in Photoshop) that are upscaled (stretched larger than 100% or with a resolution higher than the original) will create blurry, and even unrecognizable prints, depending on how severely the image was upscaled. Line art images (vector images, such as what is created in Illustrator, and most clip art – including SmartDraw) are scalable, which means that they can be stretched larger without any loss of integrity to the image. Vector images generally have large areas of solid colors and crisp lines. Raster images generally have gradients and instead of crisp lines, they have stepped lines.

[Thank you to Professor Lykins for providing the following material on raster versus vector images.]

Raster images are created using pixels and since pixels are square (or non-square rectangles if you are working with broadcast video images), they have to use what is called anti-aliasing to give the appearance of curves, etc. For example, if you magnify an image of a circle in Photoshop to 3600% and look at the edge of the circle, it will have a gradient of colors between the color of the circle and the background. At regular magnification (100%), this gradient is not visible to the naked eye and therefore looks like a crisp line. This is why you cannot successfully upscale a raster image. When you

make it larger than 100%, or increase its resolution from 72 to 300 pixels per inch, the image will look blurry or pixilated. Avoid this if possible.

When discussing the resolution of an image while working with it on the computer, it is correct to refer to it in pixels per inch, or PPI. This is because a computer outputs an image using pixels of light. When discussing the resolution of an image when you are printing it, dots per inch, or DPI is correct. This is because a printer outputs an image using dots of ink. All photos will be in raster format. If you want them to remain photographic, they need to remain in raster format because they have gradients. Common file formats that are raster are JPG, TIFF, BMP, and PNG. These file formats work well for photos because they allow for gradients and have millions of colors (16.7 million for an 8-bit JPG image, to be exact.)

Raster images can be very large, often several megabytes, and therefore often use a compression algorithm when the file is saved. JPG is an example of a file format that uses “lossey” compression. This means that it averages pixels close together into larger chunks of uniform color to save on file space. If you have ever seen an image on the web that looks like it has really big pixels in it, then it is an image that has been saved with a high rate of compression. The higher the rate of compression, the smaller the file size, but the lower the quality. This is fine for output to the web, but not for print. For print, use a file format such as TIFF, which uses a lossless compression algorithm. The best possible scenario is to print using the native file format of the raster program. In the case of Photoshop, that is a PSD.

Images you receive will probably be in JPG format already and there is nothing you can do to recover the lost data from JPG compression. Just avoid saving it as a JPG over and over again, because each time you do, you are compressing the image further. If you need to work on the image, save it as a PSD, or whatever file format is native to the program you are using. Only save an image as a JPG when you are completely finished with an image and ready to output it, and preferably not if you are printing.

Photos are now being created with a file format called RAW. These images give the highest level of detail and resolution and contain the “raw” pixel data from the camera. RAW file conversion software is needed to decode a RAW image. Adobe bundles Camera RAW with Photoshop. If you want to work with RAW images, it is recommended that you educate yourself in the intricacies of dealing with these images. It is time-consuming and complicated, but very rewarding. At this point in time, most evidentiary photos will be in JPG format. RAW is generally the domain of serious photographers and artists. Opening a JPG and saving it as a PSD will NOT make it a better quality.

Vector images are created using mathematical calculations that represent the shape, color and size of the item being displayed. Let’s go back to our example of a circle. If you were to zoom into the edge of a circle to a magnification of 3600% in a program like Illustrator, you would see a perfectly clean arc where the edge of the circle meets the background color. There would not be the stair-stepping you saw in Photoshop because while on the computer, the circle is a mathematically perfect circle, unhindered by pixels. This is why you can scale it to any size without degradation of the image.

The problem lies when you print the image. You are then converting a mathematically perfect image on the computer screen into dots that can be printed onto paper. This is when you need to pay attention to resolution. If you output a vector image in high resolution, 300 DPI, then it will print well. If you output it in a low resolution, 72 DPI, then the print will not look as good because the dots of ink will be further away from one another in the page.

Vector software is often referred to as drawing or illustration software. Vector art is almost always created within the program itself, unlike raster, which usually starts with a photograph imported into the program. Calling it a drawing program is a bit counterintuitive, though. In Photoshop, you can use a paintbrush and it lays down a line of “paint” just like a real brush. But in Illustrator, if you want to create a line, you use a feature called the pen tool. But you don’t draw like you do with a regular pen. This is

where almost all confusion starts with people who are new to vector art. The pen tool should more accurately be called the point tool, because that is what it does. It lays down points. Because it is a mathematically-based vector system, these programs basically connect the dots to create images. If you want to learn more about creating vector images from scratch, Professor Lykins would recommend taking a course in it, or looking at some of the tutorials for Illustrator on lynda.com. Thankfully, vector art is easily available in symbols such as clip art galleries and the libraries in SmartDraw, so you don't need to know how to create them to use them! But you do need to understand a bit about them in order to work with them professionally.

Vector images generally have large areas of solid colors. They can create gradients, but the primary function of vector graphics is to create bold line art images. If you want to create something with lots of gradients, you might be better served to use a raster program.

Text is vector. This aids in readability and scalability. The crisp lines allow for text to be legible at small sizes. Symbols, such as what you have been working with in SmartDraw, are vector. Once again, because of the crisp lines, solid colors and scalability, vector is the perfect choice. Vector art is very small in file size. For example, a raster circle on a white background, 300 PPI, 2" x 2" could be a 1 megabyte file. A vector image of a circle on a white background could be a 3 kilobyte file. 1 MB vs. 3 KB? It does not take a mathematical genius to make the obvious choice is the vector file. And if you need it to be a 6" x 6" circle? No problem in vector. In raster, you would need to create a new file.

Vector images are perfect for creating graphics. Arrows, shapes, lines, charts, graphs, text, diagrams, floor plans, etc.; these are just some examples of vector at its best. And often you don't have to create them yourself, as you can see in SmartDraw.

Printing vector graphics is a lot like printing raster graphics. Printing from the native program in the native file format is always preferable, but here are some of the

common vector file formats: GIF, EPS, SWF, SVG, and of course AI, which is the native Illustrator file format.

One big way that vector is different from raster is in transparency. The vector file formats allow for transparency and the raster file formats do not, with a couple of exceptions. The native file format for raster, a PSD, can have transparency, but it cannot save it in any file format other than PNG. A PNG is basically a JPG with an alpha channel (an alpha channel means transparency.) The problem is that PNG is not supported as universally as JPG. And JPG cannot support transparency. For example, our circle could be created on a transparent layer in Photoshop so that the only color is within the circle. Saving it in all raster formats other than PNG would force the background to become white. In a vector file, all formats would save the background as transparent. This is important to know.

It might be better not to use print:

- When technology is available
- Screen presentations can be more cost effective; less preparation time is required and fewer resources are needed (paper, ink, etc.)
- Screen presentations can be more appealing to modern audiences
- Screen presentations allow for animation
- Screen presentations can make it easier to demonstrate complex ideas
- Screen presentations can make for a smoother presentation when they go well
- Screen presentations can be more flexible

It is good to find the appropriate output method for the materials you need to prepare and to gauge the technical skill level of the presenter. If you create something that is very sophisticated and a perfect example of the appropriate use of technology, but the person doing the presentation cannot use it efficiently, it can actually damage the story you are trying to tell. So it is important to understand who will be using what you create as well as what is being created.

The best approach is probably a mixture of print and screen graphics. Variety will keep the jury more involved as well as help emphasize the salient points of the case. Here

is an example of a mixed approach. There is a 36" print of the victim on an easel so that the jury can see what she looked like before the accident that injured her face. While that photo is still visible, you could offer a slide show of a reenactment of the accident, finishing with a photo of how she looks now. The jury members can see everything at one time, but the image of how she was before will constantly be present and they only need to look at her sitting there to see what she looks like now. It can be a powerful way to tell your story. And you want to make sure that the photo of her is high resolution, so that no one is distracted by the way the photo was created. A blurry or pixilated image might interfere with the story. You can also then use the projector to show animations, videos, etc.

Understanding the requirements of print and the possibilities of projected images can help you create demonstrative aids which will both clarify ideas and engage viewers. Ultimately, courtroom presentations are intended to aid in the story that is being told in the case and to elicit emotional responses in the viewer. But it should always happen under the umbrella of an ethical (Rules of Professional Conduct for lawyers) and humane approach that is in compliance with the rules of evidence and civil and criminal court procedures.

In Chapter 3 of *Demonstrative Evidence for Complex Litigation: A Practical Guide*, Timothy P. Maher provides a helpful list of steps in developing a strategy for using demonstrative evidence:

Step 1: Learn the technical issues of your client's case systematically and comprehensively.

Step 2: Determine the information components to present - where, when, who, what, why and how.

Step 3: Develop the theme.

Step 4: Develop the proof:

- List the evidence your team used as a basis for conclusions.
- List the relevant points from the witness and investigator testimony.
- List the conclusions from your experts.

- List the background information and basic concepts that need to be taught for the judge or jury members to comprehend the proof.

Step 6: Develop a case presentation outline.

Step 7: Determine when to use demonstrative evidence.

Step 8: Choose the best type of demonstrative evidence.

Step 9: Remember that each type of demonstrative evidence has its own features and benefits.

In terms of developing a case presentation outline, Maher gives two examples. To present a medical malpractice case from the plaintiff's point of view (the one who is injured), he suggests the following steps:

- Begin with an anatomy lesson, portraying the relevant body system.
- Then portray how the system in question normally functions.
- Next is a portrayal of the system in its abnormal condition (because of the injury).
- Then portray the medical instruments or equipment that the doctors used to treat the plaintiff, with demonstrations of how the instruments or equipment function.
- Portray the procedure, one step at a time.
- Repeat that part of the procedure that was problematic, perhaps with extended details.
- Portray the effect the result has had on the plaintiff's life and daily functions.
- Portray how the procedure should have been conducted and what the plaintiff's body and health would be had this happened.
- Finally, present monetary issues, with details of the financial damages and the compensation being requested from the doctors.

As the author suggests, if the case was being presented from the defendant's point of view, we could portray how the procedure was performed according to accepted practice and that it met recognized standards of care. We might also provide expert opinion on why the plaintiff is now in his current condition and emphasize the credentials and reputation of the doctors.

Some considerations for planning courtroom presentations are provided in Chapter 4 of *Demonstrative Evidence for Complex Litigation: A Practical Guide*. In addition to his advice for keeping it simple, Maher also offers some important information about the admissibility of demonstrative evidence. Note that recent cases

have given trial judges great discretion in what to permit to be shown in court. The most fundamental concern for demonstrative evidence is foundation. There have been cases where demonstrative evidence was kept out of a trial because it was not consistent with the expert's analysis or with the evidence. Illustrative evidence does not have the same burdens of admissibility as demonstrative evidence that is used as part of proving the case. However, illustrative evidence must still be accurate and useful. All demonstrative evidence must assist the trier of fact (jury members if the case is tried in front of a jury, the judge or magistrate if the trial is a "bench" trial). There are additional admissibility issues when demonstrative evidence is used during opening and closing arguments. It is possible that the person who developed demonstrative evidence will be called upon to testify. As stated on page 18, appropriate credentials, experience and willingness are important characteristics for the demonstrative evidence developer to possess should he or she need to testify.

Interestingly, the author of *Demonstrative Evidence for Complex Litigation: A Practical Guide* states that computer-generated video graphics receive much of the attention when discussing demonstrative evidence admissibility issues. Rather than regarding them as a unique form of demonstrative evidence, they can be viewed as an expected evolution of more traditional and simpler forms of demonstrative evidence. Other issues related to the admissibility of demonstrative evidence involve undue sensationalism. Care must be taken to avoid confusing the issues, unfair prejudice against one of the parties or anything that might mislead the jury. Because of the issues involved in using video graphics, it is common to provide copies of this material to the opposing parties before the trial so that they have an opportunity to review it. Parties sometimes will work out contentious issues at evidentiary hearings to avoid delays and unexpected decisions during the trial itself. Note some of the cautions about the opposing party and your demonstrative evidence on pages 19-20.

Many of my students are interested in developing animations, simulations and video graphics for use in the courtroom. Therefore, the discussion on pages 21-22 of

Demonstrative Evidence for Complex Litigation: A Practical Guide is particularly important. A simulation represents a physically accurate recreation of an incident based on scientific analysis. Although the term “animation” is often used as an umbrella term to include any motion graphics, it is more correctly used as a portrayal of information that is not based on an expert's scientific analysis and is not probative. Examples may include an illustration based on witness testimony or a portrayal of how a tire is constructed - in this context, the animation is used for illustrative purposes. Animation exhibits are typically used as illustrative aids and not admitted into evidence, so the burden to have them accepted for use in trial is less. Maher notes that the term “video graphics” encompasses both simulations and animations. As stated on page 22, it is important to clearly define which kind of demonstrative evidence will be used at the beginning of the development process so that there is no confusion when trying to get the material admitted for use in the trial.

You will need to be prepared to prove the accuracy of demonstrative evidence. This will include being able to provide the source of all data used as inputs to prepare your work and the data that was generated by computer graphics software. Note the example discussed on pages 22-23 of *Demonstrative Evidence for Complex Litigation: A Practical Guide* about a video graphics portrayal of a vehicle collision. Pages 23-25 discuss how demonstrative evidence can be used in alternate dispute resolution, where we use settlement conferences, mediation or arbitration to settle the case before going to trial. The remaining pages of Chapter 4 of *Demonstrative Evidence for Complex Litigation: A Practical Guide* provide some helpful suggestions for analyzing the opposing party's demonstrative evidence. We might challenge the admissibility of this evidence on a number of grounds and this may require hiring expert witnesses or experienced demonstrative evidence developers. Note the author's observation that one common problem is the accuracy of the portrayal of vehicular motion and how we can use software to model even complex vehicle dynamics. Similar problems with accuracy can occur with any case involving physics-related issues or with cases that depend on an expert's interpretation of events. If knowledgeable and credible experts can point to

problems in accuracy with the opposing party's demonstrative evidence, there will be legitimate grounds for the judge to refuse to admit the demonstrative evidence into trial.

Chapter 5 in *Demonstrative Evidence for Complex Litigation: A Practical Guide* discusses the important topic of how jury members and judges learn. As stated on page 27, this is a key to planning effective demonstrative evidence. One interesting tactic presented in Chapter 5 is to incorporate the statements of the opposing party into your demonstrative evidence - both as a way to diminish the opposing party's credibility and to enhance your side's credibility. Another suggestion is to use alternative or "what if" scenarios as a powerful means to show that what happened could have been avoided. Of course, care must be taken to provide alternatives that are reasonable and believable (not super-human or against the laws of physics and gravity, for example). Another use of "what if" scenarios is to portray the opposing party's version of events to demonstrate that it could not have happened that way (note that in a SmartDraw timeline, we can show the plaintiff's version of the sequence of events versus the defendant's version, highlighted in different colors and with annotations).

Two strategies highlighted in Chapter 5 of *Demonstrative Evidence for Complex Litigation: A Practical Guide* are combining computer-generated content with actual imagery (see pages 30-31) and incorporating motion into your presentation to show dynamics, space and time (see pages 31-32). Note that, as mentioned above, some photographs and video can be disturbing, so it may be best to blur certain areas of images, such as a face or wounds. Storyboards, discussed on page 33, are another option. The remainder of Chapter 5 covers the fundamentals of graphics design for demonstrative evidence.

Chapter 8 in *Demonstrative Evidence for Complex Litigation: A Practical Guide* has some information about using demonstrative evidence with specific types of litigation cases.

- Vehicular collisions - especially ways to demonstrate speed, position and timing of vehicles or pedestrians, including information taken from data recorders.

- Visibility cases - line-of-site, lighting parameters, distance, weather conditions.
- Medical cases - since medical cases often involve a number of related events occurring over time, a timeline exhibit is usually helpful as well as using medical illustrations to explain normal anatomical functions versus the loss of functionality of the party due to the injury. There are many opportunities to use digital medical records (x-rays, MRIs) and to add highlights, colorization, annotations and other enhancements as well as static exhibits, scale models, 2D and 3D motion graphics and edited video footage.
- Product liability cases - animations or scale models.
- Patent cases - timelines along with animations or scale models.
- Commercial litigation cases - timelines, print exhibits, trial presentation software and edited videotape.
- Property-related cases - traditional photographs for small areas, but scale models, computer graphics, architectural elevation drawings, digital motion panoramas, animations and edited video footage may be more helpful.
- Criminal cases - some possibilities might be bullet path trajectories (which is easy to do with SmartDraw software), scale models, edited video footage of crime scenes, video graphics, enhanced audio recordings of conversations with transcripts, enhanced surveillance video and document exhibits.
- Slip, trip and fall cases - a combination of computer graphics with photographs may be helpful, particularly if the photographs are digitized and then altered to show what the conditions should have been (rather than the dangerous condition they were in), human motion graphics, provided that they conform to the laws of physics and are believable. (One problem with some courtroom animations has been that what they purport to demonstrate actually defies the laws of physics.) Also consider surveillance video that is edited and enhanced.
- Industrial cases - as stated on page 59, many industrial processes are beyond the experiences of a judge or jury members. Helpful demonstrative evidence tools could include edited video footage of the manufacturing process, computer animations of the process, computer generated graphics, video graphics. Showing alternative scenarios can also be helpful.
- Fire and explosion cases - the origin and cause of these events can be portrayed using exhibits, scale models, motion panoramas, edited video and video graphics and video graphic recreations based on data from fire simulation programs.
- Shipping and packaging cases - consider using video graphics when humans are involved as well as alternative portrayals of what should have happened to avoid the incident. Exhibits that illustrate the responsibility and relationship of various parties will be important.
- Aviation cases - information from flight data recorders - the black boxes - can be used as the basis for video graphic portrayals. Audio recordings from the cockpit and control tower, edited footage from news reports and site investigations can also be integrated.

D. Does Each of Your Exhibits Pass the 8-Point Test?

This material is based on content provided by Mr. Christopher DelliCarpini, who prepared this section of the manual for the same seminar that was given in New York in February. As the author observes in his introduction, “[t]he origins of the eight-point test may be lost in the midst of time, but its common-sense value is undeniable.” He goes on to state that “[a]sking yourself these questions about each exhibit, as early as possible in the case, will help you create exhibits that are not just admissible but more effective.” The eight-point test is comprised of various considerations, some of which are grounded in the rules of evidence and procedure and others which reflect the need to make the most compelling case to the jury:

- Relevance
- Probativeness v. Prejudice
- Authentication
- Admissibility
- Clarity
- Legibility
- Consistency
- Attractiveness

Kelleher identifies the five challenges when using trial presentation software with practical tips for how to mitigate them in a white paper from LexisNexis, based on a nationwide survey of law firm partners, associates and litigation support professionals conducted in December 2013:

- Keeping evidence organized.
- Keeping the jury and judge engaged.
- Lack of time and/or resources to implement correctly.
- Issues with the software working correctly.
- Connecting to presentation devices.

E. What Can Opposing Counsel Do with the Evidence I Introduce?

Opposing counsel may object to evidence on a number of grounds, including the rules of evidence and the rules of procedure as well as local civil and criminal court rules.

At every trial or hearing requiring the admission of evidence, attorneys have the duty to object to evidence that the rules of court deem inadmissible. Objections must be made in a timely fashion, as soon as the witness or opposing party attempts to improperly introduce evidence. An attorney who fails to immediately recognize and object to inadmissible evidence faces serious consequences: the evidence may be admitted for the judge or jury to consider, and should the case be appealed, the appellate court will allow it to stand as admitted. On the other hand, an attorney who makes frequent objections to proper, admissible evidence runs the risk of alienating the jury or angering the judge. A trial lawyer therefore must learn to quickly recognize and correctly object to inadmissible evidence.

Once an attorney objects, the judge must decide whether to sustain the objection and disallow the evidence, or overrule the objection and permit the evidence. To assist this decision, the attorney must generally tell the judge the legal basis for the objection. (Evidentiary Objections, <http://law.jrank.org/pages/6613/Evidence-Objections.html>, accessed 7/17/17.)

The website provides a long list of potential objections and the legal basis for them. As excerpted from *Building Trial Notebooks*,

There are only a couple dozen common evidence objections that are likely to be used in most trials. Every experienced civil trial lawyer hears them over and over. There are a number of other objections that can be made. Some evidence texts give lists of 150 or more. But for all practical purposes, there are only the basic two dozen that you need to remember with unqualified certainty and sure familiarity. (<http://www.jameseducationcenter.com/articles/essential-objections-checklist/>, accessed 7/17/17)

Note the caution that most objections are not allowed to be made during depositions. The website for *Building Trial Notebooks* provides a list of the basic two dozen objections:

1. Admitted.
2. Argumentative.

3. Assumes facts not in evidence.
4. Best evidence rule.
5. Beyond the scope of direct / cross / redirect examination.
6. Completeness.
7. Compound question / double question.
8. Confusing / vague / ambiguous.
9. Counsel is testifying.
10. Form.
11. Foundation.
12. Hearsay (Rules 801, 802, 803 and 804).
13. Improper impeachment.
14. Incompetent.
15. Lack of personal knowledge.
16. Leading.
17. Misstates evidence / misquotes witness / improper characterization of evidence.
18. Narrative.
19. Opinion (Rules 701 and 702).
20. Pretrial ruling.
21. Privileged communication.
22. Public policy.
23. Rule 403 (undue waste of time or undue prejudice/immaterial/irrelevant/ repetitive / asked and answered / cumulative / surprise).
24. Speculative.

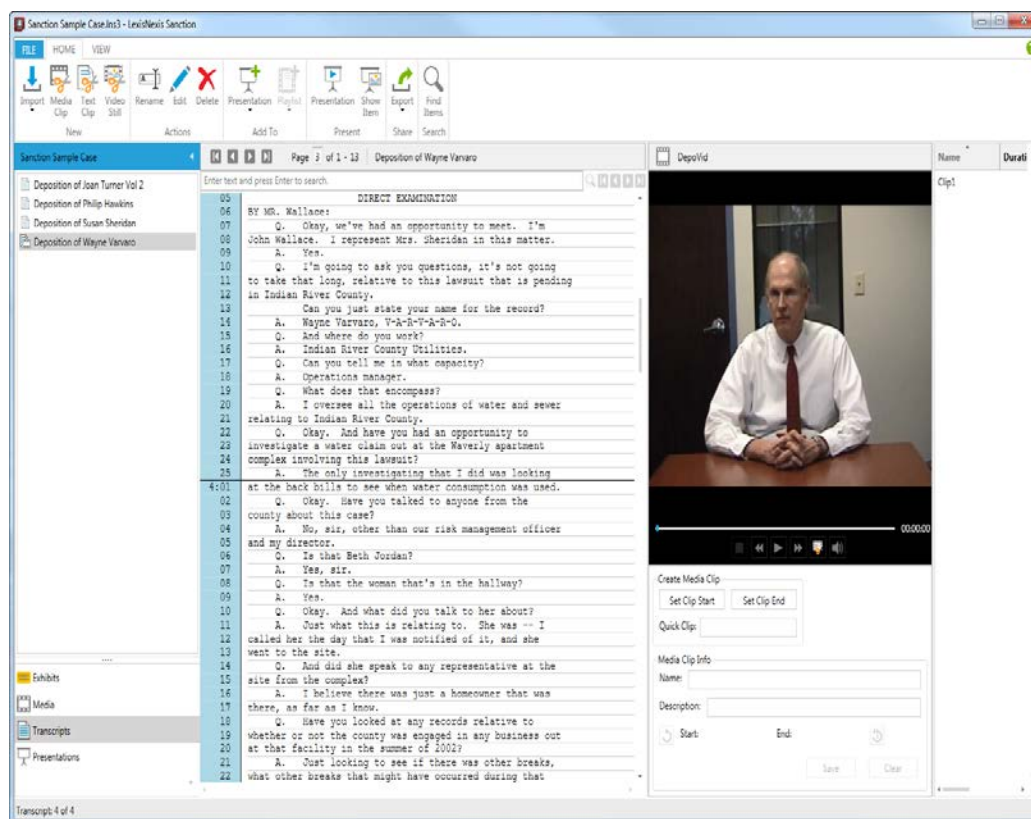
F. Video Depositions (Prior Testimony)

As indicated on page 340 of *Technology in the Law Office*, 4th edition, “[d]epositions allow parties to directly question parties and witnesses, under oath, without the limitations of carefully prepared, written answers to interrogatories.” The author goes on to observe that “[d]epositions are, within the confines of court rules and procedures, opportunities to ask open-ended questions, obtain spontaneous responses, and follow up with additional questions.” Of course, the costs of taking depositions can be significant, which includes the expense of hiring a court reporter to transcribe the testimony. As the author states, “[i]n videotaped depositions, the costs may include one or more videographers or technicians, and in some cases the cost of videoconferencing connections.” Among the reasons provided for videotaping a deposition are to preserve the testimony of a witness who might otherwise be unable to attend the trial due to physical illness, age, travel or other commitments.

There are other reasons why videotaping a deposition may be part of a smart trial strategy. A great deal of communication is non-verbal and includes body language, facial expressions and gestures. It also puts the entire testimony into context. As indicated by Montrese his article *Lights, Camera, Action! The Power of Video Depositions in Business Litigation* from *Michigan Bar Journal*, “[i]ncluding excerpts of a video deposition at trial can be pivotal and dramatic.” He suggests that you can weave deposition excerpts of the admissions of an opposing party into opening statements, thus allowing the jury member to both see and hear the flaws and weaknesses of his/her case. He observes that it will profoundly affect the perception of the opposing party from the very beginning of a case. In the article, the author goes on to relate how he used video depositions in a business litigation case to reveal how the defendants had concealed vital evidence from plaintiffs. He states that “[t]he jurors told us that observing these vignettes during the opening statement was extremely helpful to their understanding of the case.” As he concludes on page 45.

Video depositions are an important tool for telling the story vividly. The witness's expressions, tone of voice, and body language can be captured on video more effectively than trying to describe the same testimony to a jury. Practitioners should keep this in mind when planning depositions and should look for effective ways to use video deposition clips in their opening and closing statements and examinations. If used correctly, this can convey to the jury, in a more effective and visceral way, the story that words alone cannot capture.

Software tools can facilitate the ability to present video depositions. For example, as indicated on page 515 of *Technology in the Law Office*, 4th edition, in Sanction, a videotaped deposition of a witness may be presented with a written transcript displayed simultaneously on a split screen. The lawyer can highlight sections within the transcript and add annotations to focus the jury's attention on important points and inconsistencies in the testimony. Here is an example of a video deposition, with the transcript on the left-hand side and video of the witness on the right-hand side of the screen, from the Sanction website, <https://www.lexisnexis.com/en-us/products/sanction.page>, accessed 7/17/17.



In terms of the use of video depositions at trial, lawyers will want to be mindful of the Doctrine of Completeness.

Under Rule 106 of the Federal Rules of Evidence, when part of a writing or recorded statement is introduced, an adverse party may require introduction of any other part or any other writing or recorded statement which ought in fairness to be considered contemporaneously with the writing or recorded statement originally introduced. This additional evidence is called explanatory evidence, and its purpose is to qualify, explain or put in context the original piece of introduced evidence.

The explanatory writing does not have to be part of same writing or recording. Additionally, even otherwise inadmissible evidence, such as hearsay, can be admissible under this rule if it is necessary to correct any confusion or wrongful impression created by the admission of the original evidence. (Doctrine of Completeness, Legal Information Institute, https://www.law.cornell.edu/wex/doctrine_of_completeness, accessed 7/17/17.)

When using technology to present evidence in court, the Rules of Professional Conduct should also be considered. For example, ABA Model Rule 3.4 Fairness To Opposing Party And Counsel states that a lawyer shall not:

(a) unlawfully obstruct another party's access to evidence or unlawfully alter, destroy or conceal a document or other material having potential evidentiary value. A lawyer shall not counsel or assist another person to do any such act. (ABA Model Rules, Rule 3.4, https://www.americanbar.org/groups/professional_responsibility/publications/model_rules_of_professional_conduct/rule_3_4_fairness_to_opposing_party_counsel.html, accessed 7/17/17.)

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